

1646



1600

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RAW SEQUENCE LISTING

DATE: 01/08/2003

PATENT APPLICATION: US/09/319,724A

TIME: 14:43:08

Input Set : A:\aoyama5001.ST25.txt

Output Set: N:\CRF4\01082003\I319724A.raw

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TECH CENTER 1600/2900

3 <110> APPLICANT: VETIGEN
 4 LENZEN, Gerlinde
 5 STROSBERG, Arthur Donny
 6 SUGASAWA, Toshinari
 7 MOROOKA, Shigeaki
 9 <120> TITLE OF INVENTION: MAMMALIAN ICYP (IODOCYANOPINDOLOL) RECEPTOR AND ITS APPLICATIONS
 11 <130> FILE REFERENCE: 053356-5001-US
 13 <140> CURRENT APPLICATION NUMBER: US 09/319,724A
 14 <141> CURRENT FILING DATE: 1999-09-08
 16 <150> PRIOR APPLICATION NUMBER: EP 96402719.7
 17 <151> PRIOR FILING DATE: 1996-12-12
 19 <160> NUMBER OF SEQ ID NOS: 14
 21 <170> SOFTWARE: PatentIn version 3.1
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 439
 25 <212> TYPE: PRT
 26 <213> ORGANISM: Homo sapiens
 28 <400> SEQUENCE: 1
 30 Met Tyr Ile Asp Asp Leu Pro Ile Trp Gly Ile Val Gly Glu Ala Asp
 31 1 5 10 15
 34 Glu Asn Gly Glu Asp Tyr Tyr Leu Trp Thr Tyr Lys Lys Leu Glu Ile
 35 20 25 30
 38 Gly Phe Asn Gly Asn Arg Ile Val Asp Val Asn Leu Thr Ser Glu Gly
 39 35 40 45
 42 Lys Val Lys Leu Val Pro Asn Thr Lys Ile Gln Met Ser Tyr Ser Val
 43 50 55 60
 46 Lys Trp Lys Lys Ser Asp Val Lys Phe Glu Asp Arg Phe Asp Lys Tyr
 47 65 70 75 80
 50 Leu Asp Pro Ser Phe Phe Gln His Arg Ile His Trp Phe Ser Ile Phe
 51 85 90 95
 54 Asn Ser Phe Met Met Val Ile Phe Leu Val Gly Leu Val Ser Met Ile
 55 100 105 110
 58 Leu Met Arg Thr Leu Arg Lys Asp Tyr Ala Arg Tyr Ser Lys Glu Glu
 59 115 120 125
 62 Glu Met Asp Asp Met Asp Arg Asp Leu Gly Asp Glu Tyr Gly Trp Lys
 63 130 135 140
 66 Gln Val His Gly Asp Val Phe Arg Pro Ser Ser His Pro Leu Ile Phe
 67 145 150 155 160
 70 Ser Ser Leu Ile Gly Ser Gly Cys Gln Ile Phe Ala Val Ser Leu Ile
 71 165 170 175
 74 Val Ile Ile Val Ala Met Ile Glu Asp Leu Tyr Thr Glu Arg Gly Ser
 75 180 185 190
 78 Met Leu Ser Thr Ala Ile Phe Val Tyr Ala Ala Thr Ser Pro Val Asn

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79          195          200          205
82 Gly Tyr Phe Gly Gly Ser Leu Tyr Ala Arg Gln Gly Gly Arg Arg Trp
83          210          215          220
86 Ile Lys Gln Met Phe Ile Gly Ala Phe Leu Ile Pro Ala Met Val Cys
87 225          230          235          240
90 Gly Thr Ala Phe Phe Ile Asn Phe Ile Ala Ile Tyr Tyr His Ala Ser
91          245          250          255
94 Arg Ala Ile Pro Phe Gly Thr Met Val Ala Val Cys Cys Ile Cys Phe
95          260          265          270
98 Phe Val Ile Leu Pro Leu Asn Leu Val Gly Thr Ile Leu Gly Arg Asn
99          275          280          285
102 Leu Ser Gly Gln Pro Asn Phe Pro Cys Arg Val Asn Ala Val Pro Arg
103          290          295          300
106 Pro Ile Pro Glu Lys Lys Trp Phe Met Glu Pro Ala Val Ile Val Cys
107 305          310          315          320
110 Leu Gly Gly Ile Leu Pro Phe Gly Ser Ile Phe Ile Glu Met Tyr Phe
111          325          330          335
114 Ile Phe Thr Ser Phe Trp Ala Tyr Lys Ile Tyr Tyr Val Tyr Gly Phe
115          340          345          350
118 Met Met Leu Val Leu Val Ile Leu Cys Ile Val Thr Val Cys Val Thr
119          355          360          365
122 Ile Val Cys Thr Tyr Phe Leu Leu Asn Ala Glu Asp Tyr Arg Trp Gln
123          370          375          380
126 Trp Thr Ser Phe Leu Ser Ala Ala Ser Thr Ala Ile Tyr Val Tyr Met
127 385          390          395          400
130 Tyr Ser Phe Tyr Tyr Tyr Phe Phe Lys Thr Lys Met Tyr Gly Leu Phe
131          405          410          415
134 Gln Thr Ser Phe Tyr Phe Gly Tyr Met Ala Val Phe Ser Thr Ala Leu
135          420          425          430
138 Gly Ile Met Cys Gly Ala Ile
139          435

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142 <210> SEQ ID NO: 2

143 <211> LENGTH: 1317

144 <212> TYPE: DNA

145 <213> ORGANISM: Homo sapiens

147 <400> SEQUENCE: 2

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148 atgtacatag atgatttacc aatatggggt attgttggtg aggctgatga aaatggagaa      60
150 gattactatc ttgggacctt taaaaaactt gaaatagggt ttaatggaaa tcgaattggt      120
152 gatgttaatc taactagtga aggaaagggt aaactgggtc caaatactaa aatccagatg      180
154 tcatattcag taaaatggaa aaagtcagat gtgaaatttg aagatcgatt tgacaaatat      240
156 cttgatccgt ctttttttca acatcggatt cattggtttt caattttcaa ctcttcatg      300
158 atggtgatct tcttggtggg cttagtttca atgattttta tgagaacatt aagaaaagat      360
160 tatgctcggg acagtaaaga ggaagaaatg gatgatatgg atagagacct aggagatgaa      420
162 tatggatgga aacagggtgca tggagatgta tttagaccat caagtcaccc actgatattt      480
164 tcctctctga ttggttctgg atgtcagata tttgctgtgt ctctcatcgt tattattggt      540
166 gcaatgatag aagatttata tactgagagg ggatcaatgc tcagtacagc catatttggt      600
168 tatgctgcta cgtctccagt gaatggttat tttggaggaa gtctgtatgc tagacaagga      660
170 ggaaggagat ggataaagca gatgtttatt ggggcattcc ttatcccagc tatggtgtgt      720
172 ggcactgcct tcttcatcaa tttcatagcc atttattacc atgcttcaag agccattcct      780

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174 tttggaacaa tgggtggccgt ttgttgcac tgtttttttg ttattcttcc tctaaatctt 840
176 gttggtacaa tacttggccg aaatctgtca ggtcagccca actttccttg tctgtgtcaat 900
178 gctgtgcctc gtcctataacc ggagaaaaaa tggttcatgg agcctgcggt tattgtttgc 960
180 ctgggtggaa ttttaccttt tggttcaatc tttattgaaa tgtatttcat cttcacgtct 1020
182 ttctgggcat ataagatcta ttatgtctat ggcttcatga tgctggtgct ggttatcctg 1080
184 tgcatgtga ctgtctgtgt gactattgtg tgcacatatt ttctactaaa tgcagaagat 1140
186 taccgtggc aatggacaag ttttctctct gctgcatcaa ctgcaatcta tgtttacatg 1200
188 tattcctttt actactatct tttcaaaaaca aagatgtatg gcttatttca aacatcattt 1260
190 tactttggat atatggcggg atttagcaca gccttgggga taatgtgtgg agcgatt 1317

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193 <210> SEQ ID NO: 3

194 <211> LENGTH: 965

195 <212> TYPE: DNA

196 <213> ORGANISM: Homo sapiens

198 <400> SEQUENCE: 3

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199 cagatgtcat attcagtaaa atggaaaaag tcagatgtga aatttgaaga tcgatttgac 60
201 aaatatcttg atccgtcctt ttttcaacat cggattcatt ggttttcaat tttcaactcc 120
203 ttcattgatg tgatcttctt ggtgggctta gtttcaatga ttttaagtga aacattaaga 180
205 aaagattatg ctccgtacag taaagaggaa gaaatggatg atatggatag agacctagga 240
207 gatgaatatg gatggaaaca ggtgcatgga gatgtattta gaccatcaag tccccactg 300
209 atattttcct ctctgattgg ttctggatgt cagatatttg ctgtgtctct catcgttatt 360
211 attgttgcaa tgatagaaga ttatataact gagaggggat caatgctcag tacagccata 420
213 tttgtctatg ctgctacgtc tccagtgaat ggttatttta gaggaagtct gtatgctaga 480
215 caaggaggaa ggagatggat aaagcagatg tttattgggg cattccttat cccagctatg 540
217 gtgtgtggca ctgccttctt catcaatttc atagccattt attaccatgc ttcaagagcc 600
219 attccttttg gaacaatggg ggccgtttgt tgcactgtgt tttttgttat tcttctcta 660
221 aatcttggtg gtacaatact tggccgaaat ctgtcagggt agcccaactt tccttgctgt 720
223 gtcaatgctg tgccctgtcc tataccggag aaaaaatggg tcatggagcc tgcggttatt 780
225 gtttgccctg gtggaatttt accttttggg tcaatcttta ttgaaatgta tttcatcttc 840
227 acgtctttct gggcatataa gatctattat gtctatggct tcatgatgct ggtgctggtt 900
229 atcctgtgca ttgtgactgt ctgtgtgact attgtgtgca catattttct actaaatgca 960
231 gaaga 965

```

234 <210> SEQ ID NO: 4

235 <211> LENGTH: 285

236 <212> TYPE: DNA

237 <213> ORGANISM: Homo sapiens

239 <400> SEQUENCE: 4

```

240 tcagtaaaat ggaaaaagtc agatgtgaaa tttgaagatc gatttgacaa atatcttgat 60
242 ccgtcctttt ttcaacatcg gattcattgg ttttcaattt tcaactcctt catgatgggtg 120
244 atcttcttgg tgggcttagt ttcaatgatt ttaatgagaa cattaagaaa agattatgct 180
246 cggtagacga aagaggaga aatggatgat atggatagag acctaggaga tgaatatgga 240
248 tggaaacagg tgcattggga tgtattttaga ccatcaagtc accca 285

```

251 <210> SEQ ID NO: 5

252 <211> LENGTH: 17

253 <212> TYPE: PRT

254 <213> ORGANISM: Artificial sequence

256 <220> FEATURE:

257 <223> OTHER INFORMATION: Fragment generated by acidic cleavage of polypeptide able to bind ICYP

259 <400> SEQUENCE: 5

261 Asp Pro Ser Phe Phe Gln His Arg Ile His Trp Phe Ser Ile Phe Asn

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```

262 1                5                10                15
265 Ser
269 <210> SEQ ID NO: 6
270 <211> LENGTH: 17
271 <212> TYPE: PRT
272 <213> ORGANISM: Artificial sequence
274 <220> FEATURE:
275 <223> OTHER INFORMATION: Fragment generated by acidic cleavage of polypeptide able to
bind ICYP
277 <220> FEATURE:
278 <221> NAME/KEY: MISC_FEATURE
279 <222> LOCATION: (3)..(3)
280 <223> OTHER INFORMATION: Xaa can by any amino acid
283 <400> SEQUENCE: 6
W--> 285 Asp Pro Xaa Phe Phe Gln His Arg Ile His Val Phe Ser Ile Phe Asn
286 1                5                10                15
289 His
293 <210> SEQ ID NO: 7
294 <211> LENGTH: 20
295 <212> TYPE: DNA
296 <213> ORGANISM: Artificial sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: probe/primer
301 <400> SEQUENCE: 7
302 tcagtaaaat ggaaaaagtc                                20
305 <210> SEQ ID NO: 8
306 <211> LENGTH: 20
307 <212> TYPE: DNA
308 <213> ORGANISM: Artificial sequence
310 <220> FEATURE:
311 <223> OTHER INFORMATION: probe/primer
313 <400> SEQUENCE: 8
314 tgggtgactt gatggtctaa                                20
317 <210> SEQ ID NO: 9
318 <211> LENGTH: 19
319 <212> TYPE: DNA
320 <213> ORGANISM: Artificial sequence
322 <220> FEATURE:
323 <223> OTHER INFORMATION: probe/primer
325 <400> SEQUENCE: 9
326 gctgtgtctc tcatcgta                                19
329 <210> SEQ ID NO: 10
330 <211> LENGTH: 20
331 <212> TYPE: DNA
332 <213> ORGANISM: Artificial sequence
334 <220> FEATURE:
335 <223> OTHER INFORMATION: probe/primer
337 <400> SEQUENCE: 10
338 ccatccatat tcatctccta                                20
341 <210> SEQ ID NO: 11

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Input Set : A:\aoyama5001.ST25.txt

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342 <211> LENGTH: 21
343 <212> TYPE: DNA
344 <213> ORGANISM: Artificial sequence
346 <220> FEATURE:
347 <223> OTHER INFORMATION: probe/primer
349 <400> SEQUENCE: 11
350 cggtatagga cgaggcacag c                               21
353 <210> SEQ ID NO: 12
354 <211> LENGTH: 18
355 <212> TYPE: DNA
356 <213> ORGANISM: Artificial sequence
358 <220> FEATURE:
359 <223> OTHER INFORMATION: probe/primer
361 <400> SEQUENCE: 12
362 actgaatatg acatctgg                                   18
365 <210> SEQ ID NO: 13
366 <211> LENGTH: 1800
367 <212> TYPE: DNA
368 <213> ORGANISM: Homo sapiens
370 <220> FEATURE:
371 <221> NAME/KEY: CDS
372 <222> LOCATION: (3)..(1730)
373 <223> OTHER INFORMATION:
W--> 375 <400> 13
376 cc gcc gcg ctg tgg ctg ctg ctg ctg ctg ccc cgg acc cgg gcg       47
377   Ala Ala Leu Trp Leu Leu Leu Leu Leu Leu Pro Arg Thr Arg Ala
378   1           5           10          15
380 gac gag cac gaa cac acg tat caa gat aaa gag gaa gtt gtc tta tgg       95
381 Asp Glu His Glu His Thr Tyr Gln Asp Lys Glu Glu Val Val Leu Trp
382           20          25          30
384 atg aat act gtt ggg ccc tac cat aat cgt caa gaa aca tat aag tac       143
385 Met Asn Thr Val Gly Pro Tyr His Asn Arg Gln Glu Thr Tyr Lys Tyr
386           35          40          45
388 ttt tca ctt cca ttc tgt gtg ggg tca aaa aaa agt atc agt cat tac       191
389 Phe Ser Leu Pro Phe Cys Val Gly Ser Lys Lys Ser Ile Ser His Tyr
390           50          55          60
392 cat gaa act ctg gga gaa gca ctt caa ggg gtt gaa ttg gaa ttt agt       239
393 His Glu Thr Leu Gly Glu Ala Leu Gln Gly Val Glu Leu Glu Phe Ser
394           65          70          75
396 ggt ctg gat att aaa ttt aaa gat gat gtg atg cca gcc act tac tgt       287
397 Gly Leu Asp Ile Lys Phe Lys Asp Asp Val Met Pro Ala Thr Tyr Cys
398 80           85          90          95
400 gaa att gat tta gat aaa gaa aag aga gat gca ttt gta tat gcc ata       335
401 Glu Ile Asp Leu Asp Lys Glu Lys Arg Asp Ala Phe Val Tyr Ala Ile
402           100         105         110
404 aaa aat cat tac tgg tac cag atg tac ata gat gat tta cca ata tgg       383
405 Lys Asn His Tyr Trp Tyr Gln Met Tyr Ile Asp Asp Leu Pro Ile Trp
406           115         120         125
408 ggt att gtt ggt gag gct gat gaa aat gga gaa gat tac tat ctt tgg       431

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RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:6; Xaa Pos. 3

VERIFICATION SUMMARY

DATE: 01/08/2003

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TIME: 14:43:09

Input Set : **A:\aoyama5001.ST25.txt**Output Set: **N:\CRF4\01082003\I319724A.raw**

L:285 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0

L:375 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:13,Line#:373